UNITED STATES PATENT AND TRADEMARK OFFICE

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10/808,868	03/25/2004	Takashi Aizawa	1232-5352	6663

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after t he mailing date of this communication, even if timely filed, may re duce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *25 March 2004*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-19* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *25 March 2004* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some * c) ☐ None of:

      1. ☒ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *6/29/2004*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of paper submitted under 35 U.S.C. 119(a)-(d), which paper has been placed of record in the file.

Information Disclosure Statement

2. The reference listed on the disclosure statement (IDS) submitted on 06/29/2004 has being considered by the examiner (see attached PTO 1449).

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

> Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

> When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

> In contrast, a claimed computer-readable medium encoded with a computer program is a computer element
> which defines structural and functional interrelationships between the computer program and the rest of the
> computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32
> F.3d at 1583-84, 32 USPQ2d at 1035.

5. Claims 17, 18, and 19 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter as follows. Claims 17, 18, and 19 defines a program

for executing the white balance method embodying functional descriptive material.

However, the claim does not define a computer-readable medium or memory and is thus non-

statutory for that reason (i.e., "When functional descriptive material is recorded on some

computer-readable medium it becomes structurally and functionally interrelated to the

medium and will be statutory in most cases since use of technology permits the function of

the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the

presently claimed a program for executing the white balance method can range from paper on

which the program is written, to a program simply contemplated and memorized by a person.

The examiner suggests amending the claim to embody the program on "computer-readable

medium encoded with a computer program" or equivalent in order to make the claim

statutory. Any amendment to the claim should be commensurate with its corresponding

disclosure.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3-4, 6-7, 9, and 13-19 are rejected under 35 U.S.C. § 102(e) as being anticipated by Yamaya, US 2004/0109062.

Regarding claim 1, Yamaya discloses an information acquisition method for an information processing apparatus (a USB host personal computer 100, Fig. 1) which acquires attribute information related to image data of images stored in an external device (a digital camera 102, Fig. 1), comprising:

- detecting whether the information processing apparatus (100) is connected to the external device (102) so that they can communicate with each other (at step S111, see Fig. 5 and [0073]); and

- acquiring partial information (a file table) of the attribute information (attribute data) for each of the images when the information processing apparatus (100) connected to the external device (102) ([0075], [0078]).

Regarding claim 3, Yamaya discloses an information acquisition method further comprising in response to a request for an image by the information processing apparatus (the transfer request is sent to the controlling microcomputer; [0077]), acquiring from the external device the attribute information of the requested image (attribute data) except for the previously acquired partial information (a file table) of the attribute information ([0078]).

Regarding claim 4, Yamaya discloses an information processing method for an image recording apparatus (a digital camera 102, Fig. 1) which generates attribute information related to image data of stored images, comprising:

- detecting whether the image recording apparatus (102) is connected to an external

    device (100) so that they can communicate with each other (at step S111, see Fig.

    5 and [0073]);

- generating partial information (a file table) of the attribute information for each of

    the images when the image recording apparatus (102) is connected to the external

    device (100) ([0075]); and

- transmitting the generated partial information (a file table) of the attribute

    information to the external device ([0076], [0077]).

Regarding claims 6 and 9, these claims recite same limitations as claim 3. Thus they are

analyzed as previously discussed with rejected to claim 3 above.

Regarding claim 7, Yamaya discloses an information processing apparatus (a USB host

personal computer 100) comprising:

- a connection unit (a USB connector 11) that is connectable to an external device

    (a digital camera 102) so to be communicated therewith ([0053]); and

- an attribute information acquisition unit (controlling microcomputer 6) that

    acquires attribute information related to image data of images recorded in the

    external device ([0077], [0078]),

- wherein said attribute information acquisition unit (6) acquires from the external

    device partial information (a file table) of the attribute information for each of the

    images when the information processing apparatus (100) is connected to the

    external device (102) ([0049], [0075]).

Regarding claim 13, Yamaya discloses an information processing method for a digital

imaging system having a digital image generating apparatus (a digital camera 102) and an

information processing apparatus (a USB host personal computer 100), the digital image

generating apparatus storing image data of a plurality of generated images (for example

JPEG, MPEG, GIF, TIFF, BMP, and so forth) as image files in a storage device (a DRAM)

([0044] and [0047]), said method comprising:

- the image processing apparatus managing a plurality of pieces of attribute

   information contained in object information related to each of the image files in

   the digital image generating apparatus (102) in two or more categories (digital

   camera manages picture data with file numbers; [0079]) (attribute data is added to

   each file so that the computer can recognize related two files in the same folder;

   [0078]) (two or more categories: E-mail subfile and voice memory subfile;

   [0071]); and

- the image processing apparatus creating for each of the image files, an object only

   containing information in a part of the categories out of the plurality of pieces of

   attribute information (as at step S112 of Fig 5, the controlling microcomputer

   creates a file table that contains information that represents the relation of main

   pictures and subfiles and the types of subfiles corresponding to folders, their

   names, record date/time data, and so forth; [0073] and [0074]) when the digital

   image generating apparatus is connected to the information processing apparatus

   (only when the digital camera and the personal computer are connected through

   the USB interface, the file table is generated; [0075]).

Regarding claim 14, Yamaya discloses an information processing method according to claim 13, wherein, when an application running on the information processing apparatus (100) requires overall image data of an image, the digital image generating apparatus (102) generates attribute information of the required image (attribute data is added to each file; [0078]) except for the attribute information in the part of the categories (file type information: 1 represents an E-mail subfile and 2 represents a voice memo subfile; [0074]) generated at the time of the connection between the information processing apparatus (100) and the digital image generating apparatus (102), and the information processing apparatus (100) acquires the generated attribute information, and then stores and manages the generated attribute information in the object created at the time of the connection (see [0073], [0074], [0075], and [0078]).

Regarding claim 15, Yamaya discloses an information processing method according to claim 13, wherein the information in the part of the categories of the attribute information (file type information: 1 represents an E-mail subfile and 2 represents a voice memo subfile; [0074]) is acquired from management information (file type information) held by a file system in the digital image generating apparatus (102).

Regarding claim 16, Yamaya discloses an information processing method according to claim 14, wherein the attribute information except for the information in the part of the categories of the attribute information contains data in a file stored in the digital image generating apparatus (the controlling microcomputer 6 creates a file table for files stored in the record medium 9 and the created file table is stored in the buffer memory 8; [0073]).

Regarding claim 17, Yamaya discloses a storage medium having stored therein a program

for causing a computer to execute the information acquisition method according to claim 1

(an application program has been installed to the personal computer 100) ([0063]).

Regarding claims 18 and 19, these claims recite same limitations as claim 17. Thus they

are analyzed and rejected as previously discussed with respect to claim 17 above.

8. Claims 10 and 12 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kubo, US

7,151,564.

Regarding claim 10, Kubo discloses an image recording apparatus comprising:

- an attribute information generation unit (image processing part 30) that generates

  attribute information related to image data of recorded images (image processing

  information) (col. 5, lines 58-65 and col. 6, lines, 11-19); and

- a transmission unit (external interface circuit 38) that transmits the attribute

  information (image processing information) generated by said attribute

  information generation unit to an external device (external storage medium 40)

  (col. 6, lines, 11-19),

- wherein when the image recording apparatus is connected to the external device

  (40) so that they can communicate with each other, the attribute information

  generation unit generates partial information (for example, process parameter 54;

  see Fig. 6) of the attribute information for each of the images, and the

  transmission unit (38) transmits the generated partial information to the external

  device (col. 6, lines 11-63).

Regarding claim 12, Kubo discloses that in response to a request for an image by the

external device, said attribute information generation unit (30) generates the attribute

information of the requested image (image processing information 51, processing data 53,

additional data 55, and program 56; Fig. 6), except for the previously acquired partial

information (process parameter 54) of the attribute information, and said transmission unit

(38) transmits to the external device the generated attribute information (51, 53, 55, and 56)

except for the previously generated partial information (54) of the attribute information (col.

6, lines 41-63 and col. 7, lines 7-27).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 2, 5, 8, and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over

Takahashi in view of Malloy Desormeaux, US 2004/0201742.

Regarding claim 2, Takahashi discloses an information acquisition method for an

information processing apparatus which acquires attribute information related to image data

of images stored in an external device.

Takahashi does not does not explicitly disclose the partial information of the attribute

information requires relatively short periods of time for information acquisition processing of

the information processing apparatus.

Malloy Desormeaux discloses the partial information of the attribute information requires

relatively short periods of time for information acquisition processing of the information

processing apparatus (see [0086], lines 8-14).

Takahashi and Malloy Desormeaux are analogous art because they are from the same

field of endeavor of digital camera capable of transferring data control signals. At the time of

the invention, it would have been obvious to a person of the ordinary skill in the art to use

Malloy Desormeaux's meta data transfer in Takahashi's information processing method. The

suggestion/motivation would have been to enable the provision of the metadata in memory to

be retrieved and processed in an effective manner.

Regarding claims 5, 8, and 11, these claims recite same limitations as claim 2. Thus they

are analyzed as previously discussed with rejected to claim 2 above.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

- Otala (US 6,954,229) discloses an system that providing a camera driver which runs

  on the same computer as the application programs, and which the application

  programs can access in the same way as access to a printer driver, but which converts

  an application's print output to camera format for storage to a digital camera.

- Anderson et al. (US 6,914,625) discloses a method and apparatus for enhancing performance of a high-capacity storage media in a digital imaging device.

- Wasula et al. (US 2002/0054224) discloses a digital camera for capturing digital images and organizing the captured images for subsequent transfer from the digital camera to an external device that utilizes the digital images.

Inquiries

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Wang whose telephone number is 571-270-1703. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-270-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NGOC-YEN VU
SUPERVISORY PATENT EXAMINER